

FIGURE 1

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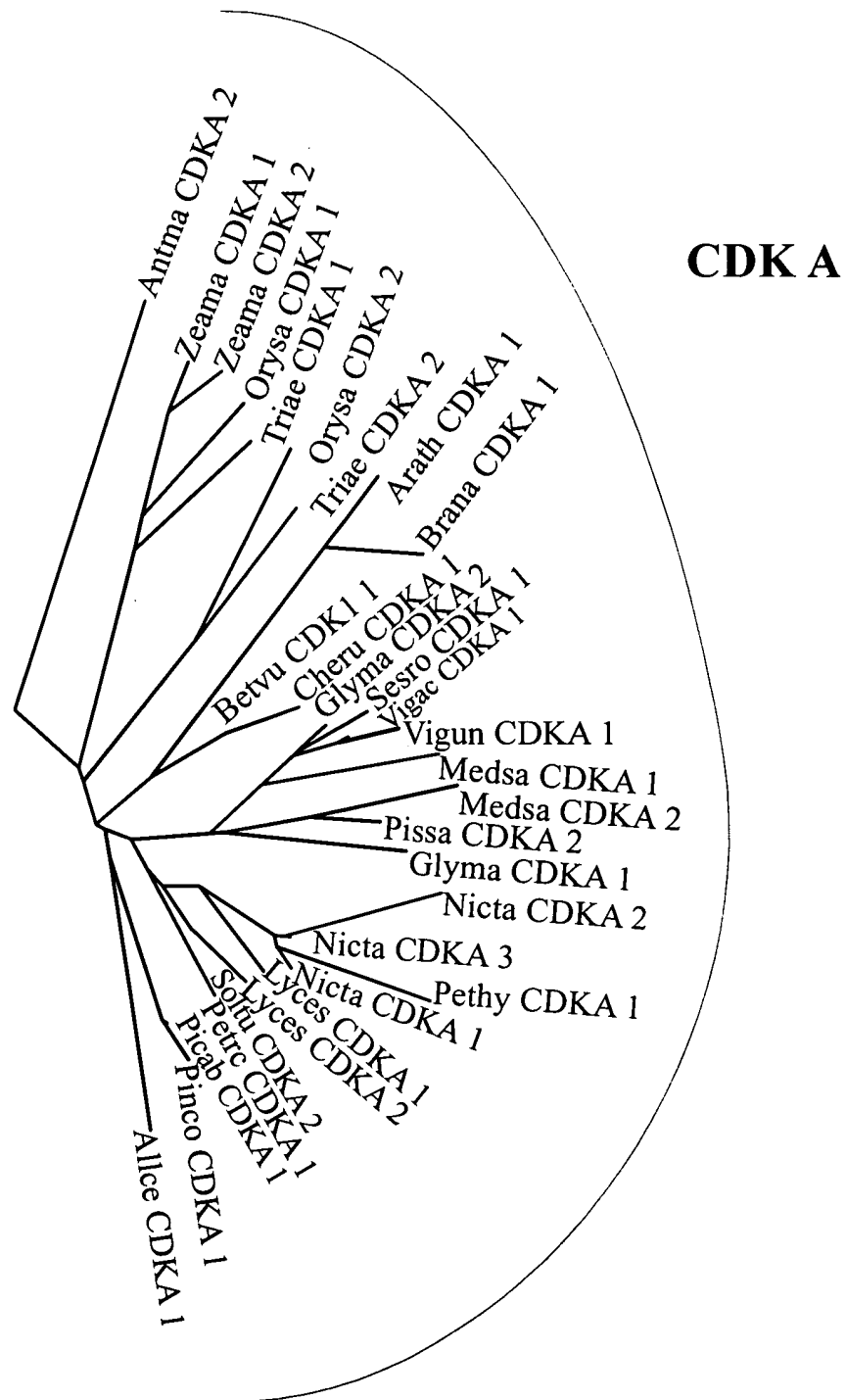


FIGURE 2

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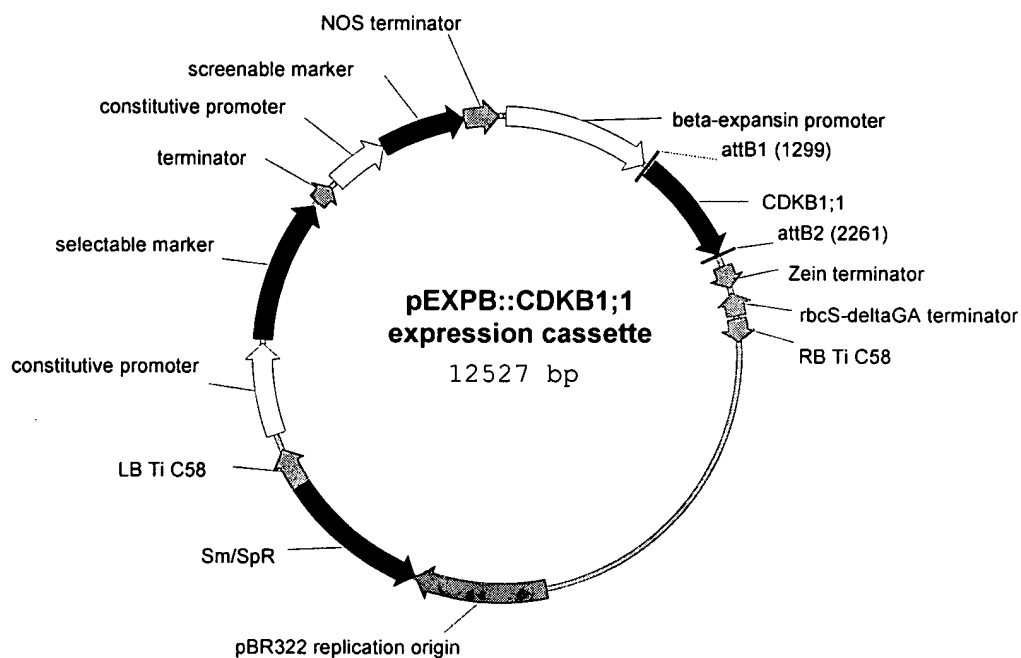


FIGURE 3

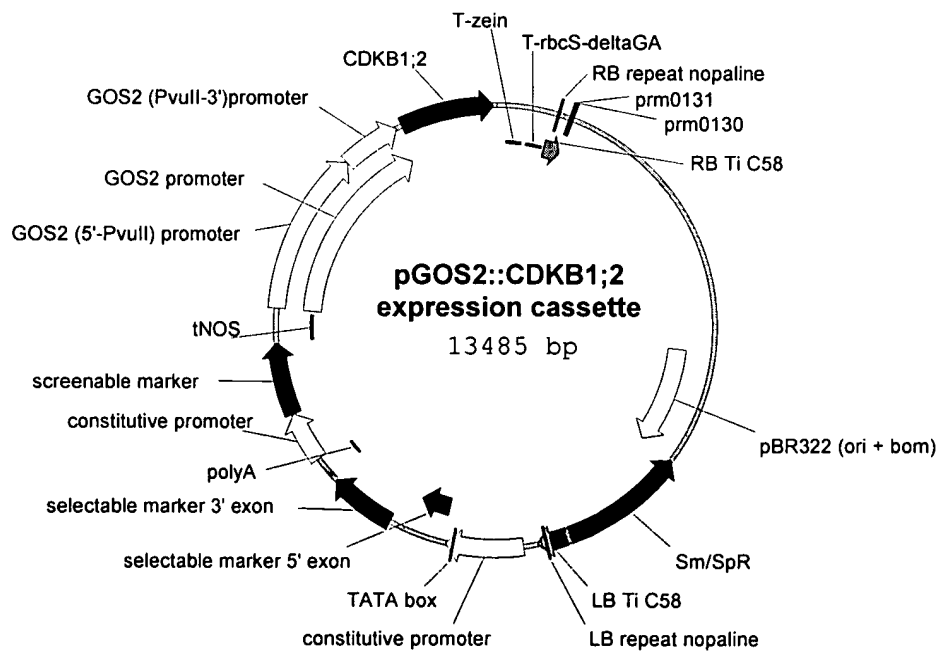


FIGURE 4

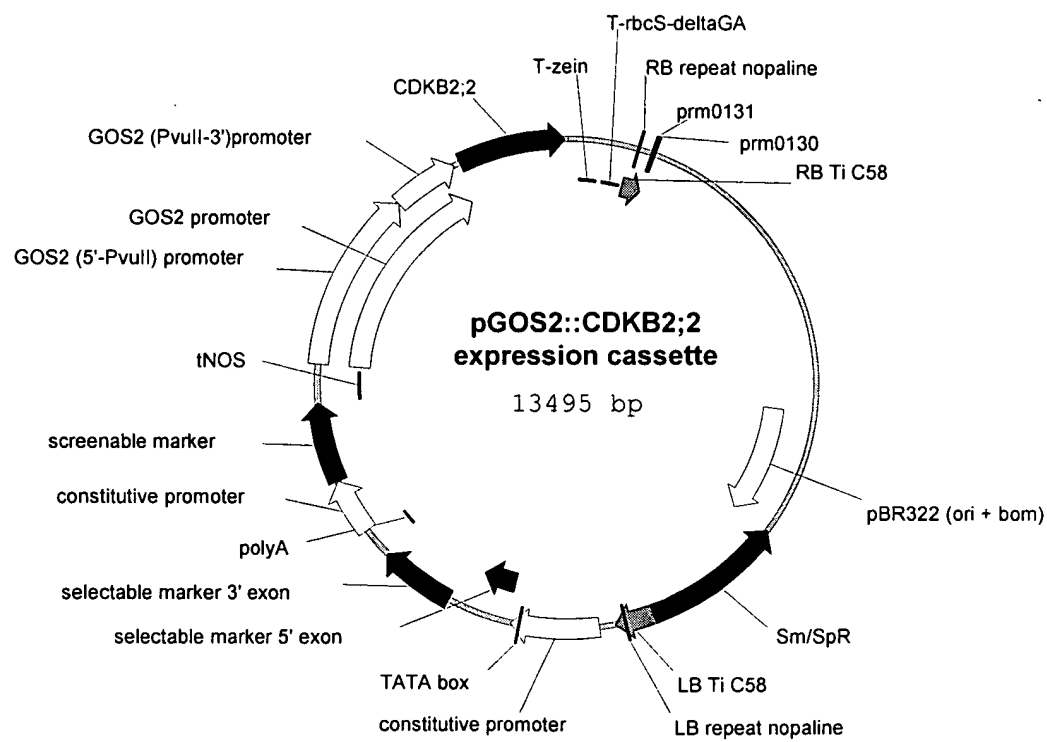


FIGURE 5

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SEQ ID NO 1: DNA sequence of CDK B 1;1

atggagaagtagcagaagctagagaaggtcggagaaggaacatacgggaaagctctacaaagc
 gatggagaaaggaactggtaagcttggtgctctgaagaaaactcgtctcgagatggacgaag
 aaggtattccaccaactgctcttcgtgagatctcgcttctccagatggtatcaacatcgatc
 tatggttggtcgattactctgcgtcgaacatggtcatcaaccatcaaccaaattctcaatctac
 caaatccaatctctatctcggttttcgagtatctcgatactgatcttaagaaattcatcgatt
 cgtataggaaaggacctaatacctaagcctcttgagccttttttgattcagaagttgatgttt
 cagctttgtaaaggtgttgcgcatgtcatagtcattggtgtgcttcaccgtgatcttaaac
 gcagaatcttctctggtgaaagataaagagcttcttaagattgctgatttggtgcttggtc
 gtgcttttactgttcctcttaagtcttatacgcgatgagattgttactctttggtatagagct
 cctgaagttcttcttggtatctactcattattcaactggtgttgacatgtggtctgttggttg
 tatctttgctgagatggttcggaggcaagctcttttccctggtgattctgagtttcagcaat
 tgcttcataatcttcagggttgctaggaacaccaactgagcagcaatggccgggtgtttccaca
 ctgctgactggcatgtttaccctaagtgggagccgcaagacttaactcttgctgttccttc
 tctttcacctcaaggagttgatcttctcacgaaaatgctcaagtacaatccagccgaaagaa
 tttcagcaaaaacagcacttgatcacccatattttgacagccttgacaagtctcagttctga

SEQ ID NO 2: Protein sequence of CDK B 1;1

MEKYEKLEKVGEGTYGKVYKAMEKGTGKLVALKKTRLEMDEEGI PPTALREISLLQMLSTSI
 YVVRLLCVEHVHQPSTKSQSTKSNLYLVFEYLDLTKKFIDSYRKGPNPKPLEPFLIQKLMF
 QLCKGVASHCHSHGVLHRDLKPQNLLLVKDKELLKIADLGLGRAFTVPLKSYTHEIVTLWYRA
 PEVLLGSTHYSTGVDMWSVGCIFAEMVRRQALFPGDSEFQQLLHIFRLLGTPTEQQWPGVST
 LRDWHVYPKWE PQDLTLAVPSLSPQGVDLLTKMLKYNPAERISAKTALDHPYFDSLDKSQF

SEQ ID NO 3: DNA sequence of CDK B 1;2

atggagaaatacagaagctcgaaaaggtcgggtgaaggaaacctatggaaaagctctacaaagc
 aatggagaaaaccaccggaactcgtcgctctgaagaaaactaggctcgaaatggacgaag
 aaggtataccaccaacggctctccgtgagatctctcttctccaaatgctttctcaatcaatc
 tacatcggttcgtctcctctgcgtcgaacatgttattcaatcgaaagattcgactgtttctca
 ctctcccaaatccaatctctatctcggttttgagtatctcgacactgatctcaagaaattta
 tagattctcatagaaagggctcgaatcctagaccgcttgaggcttctcttggtgcagagggtt
 atgtttcagcttttttaaaggtgtggctcattgtcatagccatgggtgtgcttcaccgtgatct
 taaaccgcagaatcttctattggataaggataaagggtattcttaagattgctgatttggtc
 ttagtcgtgcttttactgtgcctcttaaggcttatacacatgagattgttactctttggtat
 agagctcctgaagttttgcttggttctactcattactctactgctgttgatatttggtctgt
 tggatgcactctttgccgagatgattaggaggcaagctcttttccctggtgattctgagtttc
 agcaactacttcataattttcagattgttaggaacaccaactgagcagcaatggccgggtgta
 atggcattgcgtgactggcatgtctatccaaagtgggagccgcaagacttatcacgtgctgt
 tccatctctatctcctgaaggaattgatcttctcacgcaaattgtgaagtacaatccagcag
 aagaatttcagcaaaaagcagctctcgatcatccctactttgacagccttgacaaatctcag
 ttctga

FIGURE 6

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SEQ ID NO 4: Protein sequence of CDK B 1;2

MEKYEKLEKVGEGTYGKVYKAMEKTTGKLVALKKTRLEMDEEGIPPTALREISLLQMLSQSI
 YIVRLLCVEHVIQSKDSTVSHSPKSNLYLVFEYLDLTKKFIDSHRKGSNRPLEASLVQRF
 MFQLFKGVACHSHGVLHRDLKPQNLLLDKDKGILKIADLGLSRAFTVPLKAYTHEIVTLWY
 RAPEVLLGSTHYSTAVDIWSVGCIFAEMIRRQALFPGDSEFQQLLHIFRLLGTPTEQQWPGV
 MALRDWHVYPKWE PQDLSRAVPSLSPEGIDLLTQMLKYNPAERISAKAALDHPYFDSLDKSQ
 F

SEQ ID NO 5: DNA sequence of CDK B 2;2

atggacaacaatggagttaaacccgctgtttccgccatggaagcctttgaaaagcttgagaa
 agtaggtgaagggacttatgggaaagtttacagagcaagagagaaagctactgggatgatcg
 ttgctttgaagaagacgcgtctccatgaggatgaagaaggtgttctcccactactcttcgc
 gagatctctatcttgcgatgctcgctcgatcctcacatcgtaggttgatggatgttaa
 gcaaggaataaacaagaaggaaaaactgtactttaccttggttttcgagtatgttgatactg
 atctcaagaaattcatcagaagctttcgtcaagctggacagaacattccacaaaatactgtc
 aagtgcctgatgtaccagttatgcaaaggcatggctttttgccatggatcatggagtgttgca
 cagggatcttaagcctcacaatctcttgatggaccggaagacaatgacgctcaaaatagcag
 atcttgattagccagagccttactctcccaatgaaaaagtatacacatgagattctaact
 ctatggatatagagctccggaagtcttctcttgagcaaccattactctactggagtggatat
 gtggtctgttggtgtatttttgctgaactagtgaaccaagcaagaatctttgcgggagact
 ctgagctccaacagctcctccgtatattcaggttggtgggaacaccaaacgaagaagtttg
 cctggagtaagcaaactcaaggactggcatgaatacccgcaatggaaaccggttgagtctctc
 cacagctgtgccaaacctcgacgaggtggacttgatctcttatctaaaatgctggagtacg
 agccagcaaaacgaatctcagcaaagaaagctatggagcatccttacttcgatgatttgct
 gacaagtcctctctctga

SEQ ID NO 6: Protein sequence of CDK B 2;2

MDNNGVKPAVSAMEAFEKLEKVGEGTYGKVYRAREKATGMIVALKKTRLHEDEEGVPPTTLR
 EISILRMLARDPHIVRLMDVKQGINKEGKTVLYLVFEYVDLTKKFIRSFQAGQNI PQNTV
 KCLMYQLCKGMAFCHGHGVLHRDLKPHNLLMDRKTMTLKIADLGLARAFTLPMKKYTHEILT
 LWYRAPEVLLGATHYSTGVDMWSVGCIFAELVTKQAI FAGDSELQQLLRIFRLLGTPNEEVW
 PGVSKLKDWEYPQWKPLSLSTAVPNLDEAGLDLLSKMLEYEPAKRISAKKAMEHPYFDDL
 DKSSL

FIGURE 6 (continued)

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SEQ ID NO 7: DNA sequence of CDK A;1 (*Oryza sativa*)

acctctcctccgattaatccccctccccctcctcttctcctcccacttctgcgcctgctcttctc
ccctcgccgaccctacctactcgcgccgcccgcgtcgcatggggcggaacaggagggggg
ttaaccctgatggagcagtagagaaggaggagaagattggggagggcacgtacgggggtggt
gtacagggcgcgggacaagggtcaccaacgagacgatcgcgctcaagaagatccggcttgagc
aggaggatgagggcggtccccctccaccgcaatccgcgagatctcgctcctcaaggagatgcat
cacggcaacatcgtcagggttacacgatgttatccacagtgagaagcgcatatatcttgtctt
tgagtatctggatctggacctaagaagttcatggactcttggtccagagtttgcgaaaaacc
ccactttaattaagtcatatctctatcagatactccgcggcggttgcttactgtcattctcat
agagttcttcatcgagatttgaaacctcagaatttattgatagatcggcgactaatgcact
gaagcttgacagactttggttttagccagggcatttggaattcctgtccgcacggttactcacg
aggttgtaaccttggtgtatagagctccagagatccttcttggtatcaaggcagtttctaca
ccagttgatatgtggtcagttggttggtatctttgcagaaatggtgaaccagaaaccactggt
ccctggtgattctgagattgatgaattatttaagatattcaggggtactaggaactccaaatg
aacaagttggccaggagttagctcattacctgactacaagtctgctttcccaagtggcaa
gcacaggatcttgcaactattgtccctactcttgacctgctggtttggaccttctctctaa
aatgcttcggtacgagccaaacaaaaggatcacagctagacaggctcttgagcatgaatact
tcaaggaccttgagatggtacaatgacctgctatggctttacattggattggcatatgtat
gggctgggctcctcatttcattccttctgtgaacgctgtgcccttcggttgggcatttttg

SEQ ID NO 8: Protein sequence of CDK A;1 (*Oryza sativa*)

MEQYEKEEKIGEGTYGVVYRARDKVTNETIALKKIRLEQEDEGVPSTAIRESLLKEMHHGN
IVRLHDVIHSEKRIYLVFEYLDLDLKKFMDSCPEFAKNPTLIKSYLEYQILRGVAYCHSHRVL
HRDLKPQNLLIDRRTNALKLADFGFLARAFGIPVRTFTHEVVTLWYRAPEILLGSRQYSTPVD
MWSVGCIFAEMVNQKPLFPDSEIDELFKIFRVLGTPNEQSWPGVSSLPDYKSAFPKWQAQD
LATIVPTLDPAGLDLLSKMLRYEPNKRITARQALEHEYFKDLEMVQ

SEQ ID NO 9: Protein sequence of Mutant 1 of CDK A;1

MEQHEKEEKIGEGTYGVVYRARDKVTNETIALKKIRLEQEDEGVPSTAIRESLLKEMHHGN
IVRLHDVIHSEKRIYLDFFEYLDLDLKKFMDSCPEFAKNPTLIKSYLEYQILRGVAYCHSHRVL
HRDLKPQNLLIDRRTNALKLADFGFLARTFGIPVRTFTHEVVTLWYRAPEILLGSRQYSTPVD
MWSVGCIFAEMVNQKPLFPDSEIDELFKIFRVLGTPNEQSWPGVSSLPDYKSAFPKWQAQD
LATIVPTLDPAGLDLLSKMLRYEPNKRITARQALEHEYFKDLEMVQ

SEQ ID NO 10: Protein sequence of Mutant 2 of CDK A;1

MEQYEKEEKIGEGTYGVVYRARDKVTNETTALKKIRLEQEDEGVPSTAIRESLLKEMHHGN
IVRLHDVIHSEKRIYLVFEYLDLDLKKFMDSCPEFAKNPTLIKSYLEYQILRGVAYCHSHRVL
HRDLKPQNLLIDRRTNALKLADFGFLARAFGIPVRTFTHEVVTLWYRAPEILLGSRQYSTPVD
MWSVGCIFAEMVNQKPLFPDSEIDELFKIFRVLGTPNEQSWPGVSSLPDYKSAFPKWQAQD
LATIVPTLDPAGLDLLSKMLRYEPNKRITARQALEHEYFKDLEMVQ

FIGURE 6 (continued)

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SEQ ID NO 11: Protein sequence of Mutant 3 of CDK A;1

MEQYVKEEKIGEGTYGVVYRARDKVTNETIALKKIRLEQEDEGVPSTAIREISLLKEMHHGN
 IURLHDVIHSEKRIYLVFEYLDLDLKKFMDSCPEFAKNPTLIKSYLEYQILRGVAYCHSHSVL
 HRDLKPQNLLIDRRTNALELADFGFLARAFGIPVRTFTHEVVTWLYRAPEILLGSRQYSTPVD
 MWSVGCIFAEMVNQKPLFPDSEIDELFKIFRVLGTPNEQSWPGVSSLPDYKSAFPKWQAQD
 LATIVPTLDPAGLDLLSKMLRYEPNKRITARQALEHEYFKDLEMVQ

SEQ ID NO 12: Protein sequence of Mutant 4 of CDK A;1

MEQYEKEEKIGEGTYGVVYRARDKVTNETIALKKIRLEQEDEGVPSTAIREISLLKEMHHGN
 IURLHDVIHSEKRIYLVFEYLDLDLKKFMDSCPEFAKNPTLIKSYLEYQILRGVAYCHSHRVL
 HRDLKPQNLLIDRRTNALKLADFGFLARAFRIPVRTFTHEVVTWLYRAPEILLGSRQYSTPVD
 MWSVGCIFAEMVNQKPLFPDSEIDELFKIFRVLGTPNEQSWPGVSSLPDYKSAFPKWQAQD
 LATIVPTLDPAGLDLLSKMLRYEPNKRITARQALEHEYFKDLEMVQ

SEQ ID NO 13: Protein sequence of Mutant 5 of CDK A;1

MEPYEKEEKIGEGTYGVVYRARDKVTNETIALKKIRLAQEDEGVPSTAIREISLLKEMHHGN
 IURLHDVIHSEKRIYLVFEYLDLDLKKFMDSCPEFAKNPTLIKSYLEYQILRGVAYCHSHRVL
 HRDLKPQNLLIDLRTNALKLADFGFLARAFGIPVRTFTHEVVTWLYRAPEILLGSRQYATPVD
 MWSVGCTFAEMVNQKPLFPDSEIDELFKIFRVLGTPNEQSWPGVSSLPDYKSAFPKWQAQD
 LATIVPTLDPAGLDLLSKVLRYEPNKRITAQALEHEYFKDLEMVQ

SEQ ID NO 14: DNA sequence of beta-expansin promoter EXPB8

aaaaccaccgagggacctgatctgcaccggttttgatagttgagggaccggtgtgtctggt
 tttccgatcgagggacgaaaatcggattcgggtgtaaagttaaggacctcagatgaacttat
 tccggagcatgattgggaagggaggacataaggcccatgtcgcattgtgtttggacggtccag
 atctccagatcactcagcaggatcggccgcttcgcgtagcaccgcggtttgattcggctt
 cccgcaaggcggcggcgggtggccgtgccgcttagcttccgccggaagcgagcacgcccgc
 gccgcccagccggctctgcgtttgcaccgccttgacgcgatacatcgggatagatagctac
 tactctctccgtttcacaaatgtaaatacttctactattttccacattcatattgatgtta
 gaatatagacatatatatctatttagattcattaacatcaatatgaatgtaggaaatgctag
 aatgacttacattgtgaattgtgaaatggacgaagtacctacgatggatggatgcaggatca
 tgaaagaattaatgcaagatcgatatctgccgatgcaaaatcttactaattgcgctgcatat
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 ttacttataaccagtactacatactatatagattgatttcatgagcaaatctacaaaactgg
 aaagcaataagaaatacgggactggaaaagactcaacattaatcaccaaatatttcgccttc
 tccagcagaatatatatctctccatcttgatcactgtacacactgacagtgtacgcataaac
 gcagcagccagcttaactgtcgtctcaccgtcgcacactggccttccatctcaggctagctt
 tctcagccacccatcgatcatgtcaactcggcgcgcgacaggcacaattacgtacaaaac
 gcatgaccaaatacaaaaccaccggagaagaatcgctcccgcgcgcgggcgacgcgcacgt
 acgaacgcacgcacgcacgcccacccacgcacgatcgcgcgcgacgcccgcgacaccgg
 ccgtccaccgcgcccctcacctcgccgactataaatacgtaggcatctgcttgatcttgta
 tccatctcaccacccaaaaaaaaggaaaaaaaacaaaacacaccaagccaaataaaagcg
 aca

FIGURE 6 (continued)

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SEQ ID NO 15: DNA sequence of GOS2 promoter

aatccgaaaagtttctgcaccggttttcaccccctaactaacaatatagggaaacgtgtgctaa
atataaaatgagaccttatatatgtagcgctgataactagaactatgcaagaaaaactcatc
cacctacttttagtggcaatcgggctaaataaaaaagagtcgctacactagtttcgttttcct
tagtaattaagtgggaaaatgaaatcattattgcttagaatatacgttcacatctctgtcat
gaagttaaattattcgaggtagccataattgtcatcaaactcttcttgaataaaaaaatctt
tctagctgaactcaatgggtaaagagagagatttttttaaaaaaatagaatgaagatatct
tgaacgtattggcaaagatttaaacatataattatataatttttatagtttgtgcattcgta
tatcgcacatcattaaggacatgtcttactccatcccaattttttatttagtaattaaagaca
attgacttatttttattattatcttttttcgattagatgcaaggtagcttacgcacacactt
tgtgctcatgtgcatgtgtgagtgacacctcctcaatacacgttcaactagcaacacatctct
aatatcactcgcctattttaatacatttaggttagcaatatctgaattcaagcactccaccatc
accagaccacttttaataatatctaaaatacaaaaaataattttacagaatagcatgaaaag
tatgaaacgaactatttaggtttttcacatacaaaaaaaaaaagaattttgtctcggtgcgga
gcgccaatctcccatattgggcacacaggcaacaacagagtggtgcccacagaacaacca
caaaaaacgatgatctaacggaggacagcaagtccgcaacaaccttttaacagcaggctttg
cggccaggagagaggaggagaggcaagaaaaccaagcatcctcctcctcccatctataaat
tcctcccccttttccctctctatataggaggcatccaagccaagaagaggaggagcacca
aggacacgcgactagcagaagccgagcgaccgccttcttcgatccatatcttcgggtcgagt
tcttggtcgatctcttccctcctccacctcctcctcacagggtatgtgcccttcgggtgttc
ttggatttattgttctaggttgtgtagtagcgggcgttgatgttaggaaaggggatctgtatc
tgtgatgattcctgttcttggatttgggatagaggggttcttgatgttgcatgttatcggtt
cggtttgatttagtagtatggttttcaatcgtctggagagctctatggaaatgaaatggttta
gggtacggaatcttgcgattttgtgataccttttgtttgaggtaaaatcagagcacccggtga
ttttgcttggtgtaataaaagtacgggtgttttggtcctcgattctggtagtgatgcttctcg
atttgacgaagctatcctttgtttattccctattgaacaaaaataatccaactttgaagacg
gtcccggtgatgagattgaatgattgattcttaagcctgtccaaaatttcgcagctggcttg
tttagatacagtagtccccatcacgaaattcatggaaacagttataatcctcaggaacaggg
gattccctgttcttccgatttgccttagtcccagaatttttttcccaaatatcttaaaaag
tcactttctgggtcagttcaatgaattgattgctacaaataatgcttttatagcgttatcct
agctgtagttcagttaataggttaatacccctatagtttagtcaggagaagaacttatccgat
ttctgatctccatttttaattatatgaaatgaactgtagcataagcagtaattcatttggatt
attttttttttagctctcaccccttcattattctgagctgaaagtctggcatgaactgtcct
caattttgttttcaaattcacatcgattatctatgcattatcctccttgatctacctgtaga
agtttctttttggttattccttgactgcttgattacagaaagaaatttatgaagctgtaatc
gggatagttatactgcttgttcttatgattcatttcctttgtgcagttcttgggtgtagcttg
ccactttcaccagcaaagttc

SEQ ID NO 16: DNA sequence of sense primer prm0350

ggggacaagtttgtacaaaaaagcaggcttcacaatggagaagtagcagaagctaga

FIGURE 6 (continued)

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SEQ ID NO 17: DNA sequence of antisense primer prm0351

ggggaccactttgtacaagaaagctgggttcagaactgagacttgtcaagg

SEQ ID NO 18: DNA sequence of sense primer prm439

ggggacaagtttgtacaaaaaagcaggcttcacaatggagaaatacgagaagctc

SEQ ID NO 19: DNA sequence of antisense primer prm440

ggggaccactttgtacaagaaagctgggtggtcagaactgagatttgtc

SEQ ID NO 20: DNA sequence of sense primer prm2213

ggggacaagtttgtacaaaaaagcaggcttcacaatggacaacaatggagttaa

SEQ ID NO 21: DNA sequence of antisense primer prm2214

ggggaccactttgtacaagaaagctgggttcagagagaggacttgtcag

FIGURE 6 (continued)

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CDKB2.1      MDEG--VIAVSAMDAFEKLEKVGEPTYGKVYRAREKATGKI VALKKTRLHEDEEGVPSTT 58
CDKB2.2      MDNNGVKPAVSAMEAFEKLEKVGEPTYGKVYRAREKATGMIVALKKTRLHEDEEGVPPTT 60
CDKB1.1      -----MEKYEKLEKVGEPTYGKVYKAMEKGTGKLVALKKTRLEMDEEGIPPTA 48
CDKB1.2      -----MEKYEKLEKVGEPTYGKVYKAMEKTTGKLVALKKTRLEMDEEGIPPTA 48
               *: :*****: * * * * :*****. *****: *:
               *

CDKB2.1      LREISILRMLARDPHVRLMDVKQGLSK-----EGKTVLYLVFEYMDTDVKKFIRSF 111
CDKB2.2      LREISILRMLARDPHIVRLMDVKQGINK-----EGKTVLYLVFEYVDTDLKKFIRSF 113
CDKB1.1      LREISLLQMLSTSIYVVRLLCVEHVHQP--STKSQSTKSNLYLVFEYLDTDLKKFIDSYR 106
CDKB1.2      LREISLLQMLSQSIYIVRLLCVEHVIQSKDSTVSHSPKSNLYLVFEYLDTDLKKFIDSHR 108
               *****: :*: : :*: : * : * : *****: *****: * :
               *

CDKB2.1      STGKNIPTQT--IKSLMYQLCKGMAFCHGHGILHRDLKPHNLLMDPKMTMLKIADLGLAR 169
CDKB2.2      QAGQNI PQNT--VKCLMYQLCKGMAFCHGHGVLHRDLKPHNLLMDRKTMTLKIADLGLAR 171
CDKB1.1      KGPNP KPLEPFLIQKLMFQLCKGVACHSHGVLHRDLKPNLLLVKD KELLKIADLGLGR 166
CDKB1.2      KGSNPRPLEASLVQRFMFQLFKGVACHSHGVLHRDLKPNLLLDKDKGILKIADLGLSR 168
               . : * : : : :*: * *: * : * : *****: *****: : . *****: *
               *

CDKB2.1      AFTLPMKKYTHEILTLWYRAPEVLLGATHYSTAVDMWSVGCIFAELVTNQAI FQGDSELQ 229
CDKB2.2      AFTLPMKKYTHEILTLWYRAPEVLLGATHYSTGVD MWSVGCIFAELVTKQAI FAGDSELQ 231
CDKB1.1      AFTVPLKSYTHEIVTLWYRAPEVLLGSTHYSTGVD MWSVGCIFAEMVRRQALFPGDSEFQ 226
CDKB1.2      AFTVPLKAYTHEIVTLWYRAPEVLLGSTHYSTAVDIWSVGCIFAEMIRRQALFPGDSEFQ 228
               ***: *: * *****: *****: *****: *: *****: : : *: * *****: *
               *

CDKB2.1      QLLHIFKLF GTPNEEMWPGVSTLKNWHEY PQWKPSTLSSAVPNLDEAGVDLLSKMLQYEP 289
CDKB2.2      QLLRIFRLLGTPNEEVWPGVSKLKD WHEY PQWKL SLSTAVPNLDEAGLDLLSKMLEYEP 291
CDKB1.1      QLLHIFRLLGTPTEQQWPGVSTLRDWHVYPKWE PQDLT LAVPSLSPQGV DLLTKMLKYNP 286
CDKB1.2      QLLHIFRYL-----LLVFDANVY-VYRNQFRTL AH----- 257
               ***: *: : : : : * : : : *
               *

CDKB2.1      AKRISAKMAMEHPYFDDLPEKSSL 313
CDKB2.2      AKRISAKMAMEHPYFDDLDPKSSL 315
CDKB1.1      AERISAKTALDHPYFDSL DKSQF- 309
CDKB1.2      -----

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FIGURE 7